

AMENDMENTS TO THE CLAIMS:

This listing of claims replaces all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1 to 16. (Canceled)

17. (Currently Amended) A method for ~~operating use in~~ a communication network, said method comprising: employing that supports data frames defined by of a first protocol, where a data frame containing contains message data and a destination address identifying that corresponds to a data frame receiver to receive said data frame, the method being performed in conjunction with a host device and a switching device that are on the communication network and message data;

wherein the host device:

generating generates data packets for transmission from said the data frame, where a data packet comprising comprises a portion of said the data frame, the data packet being of defined by a second protocol, each the data packet containing comprising the destination address and a first connection identifier that corresponds to the host device; and identifying a data packet receiver to receive said data packet;

transmitting said transmits the data packets packet to the switching device; and over said communication network;

wherein the switching device:

receives the data packet, the data packet comprising a received data packet;  
upon receipt in a receiver of a transmitted data packet containing a destination  
address of a subject data frame, reading said reads the destination address of the subject  
data frame from said transmitted the received data packet;

~~determining~~ selects a new second connection identifier for the received data  
packet based on the said destination address, ~~said~~ the second new connection identifier  
corresponding to the ~~identifying a new data packet~~ receiver;

generates a new data packet from the received data packet, the new data packet  
comprising the second connection identifier and the message data, wherein the switching  
device receives ~~generating, prior to receipt of all of said data packets of said subject~~  
generated from the data frame while the new data packet is being generated, new data  
~~packets from data packets received from said subject data frame, said new data packets~~  
~~containing said new connection identifier;~~

checks the new data packet ~~checking message data of said subject data frame for a~~  
transmission ~~errors according to~~ error using a predetermined error checking technique,  
the predetermined error checking technique comprising comparing reference data ~~having~~  
~~a rated value and contained in said subject data frame to said~~ the message data, wherein  
checking begins while the switching device receives data packets generated from the data  
frame; and

~~transmitting new data packets of said subject data frame that are error free to said~~  
new data packet transmits the new data packet to the receiver if the new data packet does  
not contain a transmission error.

18. (Currently Amended) The method ~~according to~~ of claim 17, wherein the switching  
device further comprising:

~~modifying said~~ modifies the message data ~~of said subject data frame;~~ and  
~~generating generates~~ new reference data ~~for said subject data frame according to said~~  
~~packet to use in the predetermined~~ error checking technique, ~~said the~~ new reference data being  
compared to modified message data during checking ~~instead of said reference data.~~

19. (Currently Amended) The method ~~according to~~ of claim 18, wherein ~~said the~~  
message data is modified to ~~contain~~ include a counter value ~~dependent~~ that is based on prior  
transmissions of ~~said subject data packets for the~~ data frame.

20. (Currently Amended) The method ~~according to~~ of claim 18, wherein the switching  
device:

receives plural data packets from the host device, the plural data packet  
comprising received data packets;  
reads destination addresses from the received data packets;

selects a second connection identifier for the received data packets based on the destination addresses, the second connection identifier corresponding to the receiver; and  
generates new data packets from the received data packets, the new data packets comprising the second connection identifier and message data;  
wherein ~~said~~ checking ~~said message data for transmission errors~~ and ~~said~~ generating the ~~said~~ new reference data occur contemporaneously with ~~said~~ generating ~~said~~ the new data packets of ~~said~~ subject data frame.

21. (Currently Amended) The method ~~according to~~ of claim 17, wherein the switching device:

receives plural data packets from the host device, the plural data packet comprising received data packets;  
reads destination addresses from the received data packets;  
selects a second connection identifier for the received data packets based on the destination addresses, the second connection identifier corresponding to the receiver; and  
generates new data packets from the received data packets, the new data packets comprising the second connection identifier and message data; and  
wherein ~~said~~ generating ~~said~~ the new data packets occurs contemporaneously with receipt of ~~said~~ the plural data packets.

22. (Currently Amended) The method ~~according to~~ of claim 17, wherein ~~said the~~ first protocol is the Internet protocol or a protocol based on the Internet protocol; and

wherein ~~said the~~ second protocol is the ATM protocol or a protocol based on the ATM protocol.

23. (Currently Amended) The method ~~according to~~ of claim 17, wherein the switching device further comprising:

storing stores, in a first revaluation memory, an entry for assisting use in recognizing said the received data packet containing said destination address in a first revaluation memory, said first revaluation memory for storing said connection identifier of said data packet of said subject data frame containing said destination address.

24. (Currently Amended) The method ~~according to~~ of claim 23, wherein the switching device further comprising:

stores the second connection identifier in the first revaluation memory after receiving the received said data packet of said subject data frame having said destination address, the second connection identifier overwriting the entry, overwriting said entry in said first revaluation memory with said new connection identifier; and

stores the entry in the first revaluation memory after receiving a last data packet of said subject that corresponds to the data frame, the entry overwriting the second connection identifier

~~overwriting said new connection identifier stored in said first revaluation memory with said entry.~~

25. (Currently Amended) The method ~~according to~~ of claim 24, wherein the switching device identifies new connection identifiers for data packets of said subject that correspond to the data frame, and that are received after said the received data packet containing said destination address, are identified with assistance of said new using the second connection identifier stored in said the first revaluation memory.

26. (Currently Amended) The method ~~according to~~ of claim ~~23~~ 17, wherein the switching device further comprising:

~~storing said new~~ stores the second connection identifier for said data packet containing said destination address in a second revaluation memory, said the second revaluation memory used for allocating said new the second connection identifier to said the destination address.

27. (Currently Amended) The method ~~according to~~ of claim 26, wherein at least one of ~~said the first revaluation memory and said the second revaluation memory is~~ comprises an associative memory.

28. (Currently Amended) A switching unit for ~~switching routing~~ data, the data comprising a number of data frames of a first protocol, each containing data frame comprising

message data and arranged according to a first protocol and containing a destination address identifying corresponding to a receiver ~~of said data frame, and each data frame corresponding to~~ a number of data packets for transmission, ~~said each data packets each containing packet~~ comprising a portion of ~~said the~~ message data and of a data frame arranged according to a second protocol and containing a first connection identifier identifying said switching unit as receiver of ~~said data packets~~, the switching unit comprising:

a receiver for receiving ~~said transmitted~~ the data packets;

a processing unit for reading a destination address from a data packet, ~~comprising a portion of said data frame~~ and for determining a ~~new second~~ second connection identifier ~~for a new receiver~~ based on ~~said the~~ destination address, the second connection identifier corresponding to the receiver, the processing unit for generating new data packets from ~~received the~~ data packets received by the receiver of said data frame, said the new data packets ~~each~~ containing message data and the second said new connection identifier, ~~said wherein generating new data packets the receiver receives beginning prior to receipt of all of said data packets of said that correspond to the data frame while the new data packets are being generated;~~

an error checking unit for checking ~~received message data of said data frame the new~~ data packets for transmission errors ~~according to~~ using a predetermined error checking technique ~~by comparing a that compares~~ reference data ~~having a rated value included in said data frame with said received to~~ message data in the new data packets, wherein checking begins while the receiver receives data packets that correspond to the data frame; and

a transmission unit for sending ~~said new data packets of said data frame that were~~  
~~received error free to said new~~ to the receiver if the new data packets do not contain transmission  
errors.

29. (Currently Amended) The switching unit ~~according to~~ of claim 28, further  
comprising:

a first revaluation memory ~~used for use in~~ allocating ~~said new~~ the second connection  
identifier to ~~at least one connection identifier of~~ a received data packet.

30. (Currently Amended) The switching unit ~~according to~~ of claim 29, wherein ~~said the~~  
first revaluation memory ~~comprises~~ contains an entry having a predetermined value that  
identifies identifying connection identifiers of received data packets ~~for which new connection~~  
~~identifiers must still be generated.~~

31. (Currently Amended) The switching unit ~~according to~~ of claim 28, further  
comprising:

a second revaluation memory ~~used for use in~~ allocating ~~said new~~ the second connection  
identifier to at least one destination address.



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32. (Currently Amended) The switching unit ~~according to~~ of claim ~~29~~ 31, wherein at least one of ~~said~~ the first revaluation memory and ~~said~~ the second revaluation memory ~~is~~ comprises an associative memory.